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HISTORY OF ROSEBURG FOREST DISTRICT AND THE O&C

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The O&C lands in Western Oregon have been aptly described as Oregon's forest "checkerboard." The checkerboard pattern was created in 1866 when Congress granted to the Oregon and California Railroad Company all the odd numbered sections, non-mineral in character, in a strip extending 20 miles on each side of the railroad right-of-way. Because much of the land within the 40 mile strip was previously patented through sale or homesteading, the company was granted additional odd numbered sections in a strip extending 10 miles farther on each side of the original grant. These grants totaled 3,728,000 acres.

Disposition of the lands by the railroad company was restricted by three stipulations:

1. That the land grants were to be sold to a bona fide settler, and not to speculators.

2. That not more than 160 acres be sold to any one settler, and

3. That no grant land be sold for more than $2.50/acre.

REVESTMENT

As times passed, all three of the stipulations were violated and years of litigation extending up through the Supreme Court. Congress in 1916 revested the lands to the United States (all of those not sold by the company). They totaled 2,891,000 acres.

LIQUIDATION PLAN

The revestment act required that the O&C lands be classified as power sites, timberlands, and agricultural lands. The timberland classification included all lands bearing a growth of timber greater than 300,000 board feet per 40 acre subdivisions. Lands with lesser amount of timber growth were classified as agricultural and as such were subject to entry under the general provisions of the Homestead Law. After the stumpage was removed from "timberlands," the lands automatically became "agricultural" and were subject to disposal. This plan met with little success because the vast majority of those lands with real agricultural value had previously been homesteaded or [illegible]ased from the railroad.

[illegible] cutover lands, denuded of timber in some areas, generally re-[illegible]d in Federal ownership as did still virgin timberlands. Income [illegible] the liquidation plan was meager and arrangements for in-lieu

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tax payments to the O&C counties faltered. In the process, valuable timber resources were being removed from lands primarily suited for forestry with no provision for growing a new crop of trees. By the mid-thirties, it was obvious that the disposal policy was a failure. Congress, county officials, private industry, public spirited citizens, and the Department of the Interior began searching for a remedy.

FINANCIAL HISTORY

One of the objectives of interest to Congress, when it was considering the O&C Sustained Yield Act of August 28, 1937, was that of establishing a sound fiscal policy as the basis for the management of what was regarded as an unusual project in public forestry. In the plan which was adopted, Congress sought to (1) have the property yield an income to the local government, (2) pay up delinquent tax claims, (3) reimburse the Treasury for deficits created by acquiring the property and holding it during the years of low income, and (4) make this public enterprise self-sustaining as to costs of administration, so that it need not be a drain on the Treasury of the United States.

How well the plan has worked may be judged from the following results:

In 1937, the O&C fund in the Treasury showed a deficit of approximately $8,500,000 and delinquent tax claims amounted to another 2 million dollars. Consequently, at the beginning of the management program there were outstanding obligations of $10 million. The policies adopted by Congress in the 1937 Act and the resulting program produced immediate and rapid improvement in this unfavorable financial record. At the end of 1952 those obligations were completely satisfied, income had reimbursed the Treasury for all previous appropriations, and the property had paid for itself. Moreover, it is now earning income for the Treasury.

All costs of administration since 1937 have been reimbursed to the Treasury from the Government's share which is 25 per cent of the gross income. From that same, the Treasury had by 1957 gained net returns totaling approximately $10,000,000.

Timber sales since passage of the O&C Act had equaled nearly 9,000,000,000 board feet. These sales had returned over $132,000,000 at a cost to the United States of about $13,219,000.

As a result of public hearings held in Oregon and later in Washington, D.C., Congress enacted and the President signed into law the O&C Sustained Yield Act of August 28, 1937. This act established a policy of permanent forest production of the remaining 2,516,000 acres of O&C Lands and the 74,000 acres of Coos Bay Wagon Roads lands.

The history of the C.B.W.R. lands is similar to that of the O&C lands. The lands were originally granted to the State of Oregon for the construction of a wagon road from Roseburg to Coos Bay with similar stipulations as were contained in the O&C grant. The state transferred the grant to the Southern Oregon Company. Terms of the grant were violated and the lands were reconveyed to the Federal Government by act of Congress in February 1919. Of the original 105,000 acre grant, approximately 98,000 were reconveyed. Later sales reduced this acreage to the present 74,000. Approximately 15,000 acres is in the Roseburg District.

The O&C Sustained Yield Act directed that the grant lands, which were classified as timberlands, were managed for permanent forest production for the purpose of providing a permanent source of timber supply, protecting watersheds, regulating streamflow and contributing the economic stability of local communities and industries and providing recreation facilities. Payments to the 18 O&C counties were changed from tax equivalency to 75% of the gross receipts. The O&C counties only received 50% of the gross receipts until the U.S. Treasury was reimbursed for appropriations made to pay back the cost of delinquent tax claims. In 1952, the counties received the full 75% of the receipts. The amount each county received was based on the percentage value of O&C lands in each county as of 1915. Douglas County's share was approximately 25% or ¼.

Receipts from C.B.W.R. lands originally were distributed on a revenue sharing basis, but in 1939 were distributed on a valorem or tax equivalent basis. Fifty per cent of the receipts from these lands are placed in a Coos Bay Wagon Road fund which is used to pay the assessed taxes on these lands.

Intermingled with the O&C and C.B.W.R. lands were lands that were called public domain lands which are part public domain not part of the original O&C or C.B.W.R. grants which are administered by the Bureau of Land Management. The receipts from these lands are distributed as follows: 5% to the State of Oregon and 95% to the U.S. Reclamation Fund.

ADMINISTRATION

To carry out the policy and requirements of the O&C Sustained Yield Act, the O&C Revested Land Administration was organized in 1938 as a division of the General Land Office, Department of Interior. Later in 1946, the general land office was reorganized and combined with the Grazing Service in a new agency, the present Bureau of Land Management. The O&C Administration became part of the regional organization of the Bureau. A headquarters office was established in Portland and administrative district offices in Portland, (later moved to Salem), Eugene, Roseburg, and Medford, each staffed with a district forester and occasionally an assistant and a clerk. By 1945, there were five district offices (a new one having been opened at Coos Bay), each

staffed with four foresters and a secretary. By 1957, these offices had over 40 professional foresters. As of June 30, 1969, these districts had 479 permanent positions. At the end of the 1972 fiscal year they had 534 permanent positions.

During the last over 30 years, the O&C and C.B.W.R. have passed through a number of stages in the development of the conservation program authorized by the O&C Act. The more significant of these stages which have contributed to the advancement of forest management in these lands are:

Establishment of the O&C Advisory Board. The State O&C Advisory Committee, formed in 1938 now has 17 members appointed by the Secretary of Interior upon recommendation of BLM Director. Each district has an advisory board appointed by the State Director. Members of the advisory boards which vary, represent timber industry groups, labor, state and local government, academic interests, the press, and the general public.

A unique administrative arrangement prevails between the BLM State Office and the Association of O&C Counties. The association was formed in 1926 as a voluntary organization of county governments and has been active since that time in representing the interest of the O&C Counties before the Congress and with respect to activities of the BLM and Forest Service in managing O&C lands.

Reclassification of Grant Lands. Beginning in 1938, the entire O&C and C.B.W.R. acreage re-examined to determine as accurately as possible which lands were agricultural in character and which were forest lands. This reclassification established the basic tenure data necessary to embark on a sustained yield program. After this reclassification, the first local sustained yield plans were prepared.

Prior to 1938 timber disposal on lands by the BLM in western Oregon were administered by the General Land Office which had several offices in Oregon. One of these offices was located in Roseburg and it handled timber disposal in a large part of western Oregon. Timber was sold from the O&C timber lands under a procedure of issuing ten year timber patents. Sales were made on cash bids and the purchaser had ten years in which to cut and remove the timber, after which time the cutover land was subject to reclassification and homesteading as agricultural land.

O&C Appraisal System. In 1941, a new method for timber appraisal was developed and put into use for O&C timber. Formerly, appraisals were made by one of two well-experienced old timber appraisers. Obviously, with a much expanded timber sale program a more widely useable system was developed and with some modifications on logging costs, profit factors, and chip values, is still in use today. With a moderate training, qualified foresters can use the system without long years of experience required by the former practice.

Establishment of Sustained Yield Master Units. In the year 1946 and 1947 following a period during World War II, which saw major effort placed in making timber available for the war efforts, the C&C lands were officially subdivided into local sustained yield areas, called Master Units, designed to the economic stability of communities. From 1939 to this time the Master Units had been set up unofficially. The Master Units were made official by a series of public hearing and by declaration by the Secretary of Interior.

There were 12 of these Master Units in the O&C area. Allowable cuts for the Master Unit were computed by dividing the Master Units into smaller units called administrative units or operating units and computing the allowable cut for each administrative unit and totaling the allowable cut for all the administrative units in each master unit.

One of the provision of the 1937 O&C Act authorized the Secretary of Interior to enter into cooperative agreements with owners of the intermingled private land under which private land owners would pledge private land under sustained yield management in return for preferential rights to purchase O&C timber in designated areas for long periods of time. The administrative or operating units were set up somewhat for this purpose. Although no such cooperative agreements were ever developed, a proposal by one company in the Eugene District to enter into such an agreement was, in 1948, bitterly attacked by other timber operators in the area. Following this, BLM policies were changed to encourage competitive bidding for O&C timber by qualified purchasers, and a program of obtaining reciprocal right-of-way agreements and of building timber access roads was inaugerated. At this time the O&C advisory board was reconstituted to provide for better public representation.

Initiation of Modern Inventory. In 1949, BLM undertook an increased forest inventory program which, the use of modern aerial photogrametric techniques information is designed to provide up-to-date information about forest resources. Field typing was done on aerial photos which were used in constructing the type maps, and random, plots were sampled to derive volumes. Prior to this time, type areas were derived from Experiment Stations type maps and volumes from sales data. After some delay, because of the salvage emergency of the years 1951-55, the first full inventory was scheduled to completed in 1959. As a result the entire O&C area, including intermingled private lands, was mapped to higher standards, showing the location extent and content of all classes of forest stands. Using new, more advanced methods that were developed, the next inventory of O&C Resources began in fiscal year 1959. Volume sampling plots were located at fixed locations on geographic grid. Better stratification of volume sampling and radial growth and mortality measurements were taken. Field typing was done to higher standards.

Timber Salvage Program. Following a severe blowdown and consequent beetle epidemic in 1951 and 1952, the staffs of district offices were

expanded to handle a large volume of salvage timber sales. During the subsequent years, nearly 1,500,000,000 board feet of salvage timber was harvested which otherwise would have been lost to rot and bugs.

In 1962, after the Columbus Day storm, a large amount of salvage timber was cruised and sold. In fiscal year 1967 the Oxbow Fire occurred in the Smith River area which involved nearly 500,000,000 board feet of salvage fire killed timber.

Access Road Construction. In 1950, an access road program was initiated to provide access to O&C timber in drainages which contained a majority of O&C timber and where road construction costs were such that sale financed roads would have required excessively large timber sales. Early efforts were directed to opening up drainages containing large volume of salvage timber resulting from the 1951 blowdown and bark beetle epidemic. The lower Smith River drainage in western Douglas County is a prime example. BY 1952, all county claims for back taxes had been met and all reimbursements to the Treasury had been made. The counties received the full 75% under the O&C Act formula of 1952. In 1952, a new plan for distribution of the receipts was developed under which part of the money payable to the counties under the formula was instead appropriated to the BLM for access road construction. The new plan was embodied in language added to Interior Department Appropriation Act of July 9, 1952. Similar language has been included in the appropriation each year since 1952. Through fiscal year 1969 nearly $90,000,000 had been appropriated for Road Construction and Acquisition. Up to June 30, 1972, 970 miles of road had been built with appropriated funds and 6242 miles under timber sale contracts. Utilization of these funds has resulted in faster development of a complete road network serving both O&C lands and intermingled private lands. This enables the BLM to practice more intensive forestry, to provide more average timber size offerings and to increase the effectiveness of protection against fires, insects, and disease. Such a program sets the stage for more intensive management, preceeding such activities as thinning, prelogging operations, and more flexibility in the regulations of forest resources of the O&C lands.

Land Ownership Pattern Adjustments. In 1939, Congress, recognizing the problems inherent in the checkerboard ownership pattern of the O&C lands, passed the O&C Exhcange Act authorizing exchanges with other land owners for the pattern of consolidating the O&C lands. In 1954, Congress authorized a large scale exchange between the U.S. Forest Service and the BLM to enable consolidation of their respective areas of administration in Western Oregon where O&C lands and National Forest lands were intermingled. Completed in 1956, the exchange resulted in adjustments of both O&C and National Forest lands, the BLM receiving 242,724 of National Forest land and the U.S. Forest Service receiving 241,147 acres of O&C land.

The 1954 law also settled a controversy over the status of O&C lands located within the boundaries of national forest (the so-called controverted lands) declaring them to be O&C lands and vesting their

administration in the U.S. Forest Service. Receipts from these lands are deposited with O&C fund and shared in by the O&C counties in the same manner as receipts derived from O&C lands administered by BLM.

Intensified Multiple Use Program. Gradually, the staff of foresters administering the O&C lands increased. With additional help, a more intensive management program became possible. A multiple use program was developed to provide increased benefits from the utilization and conservation of all forest resources.

Timber sales have been accelerated to the point where the lands have produced the full allowable cut. The allowable cut was declared as 1120 MBF as of July 1962. In addition for the fiscal year ending in June 30, 1971, it is planned to offer 203 MM board feet in noncharge-able volume. Since the beginning of management under the O&C Act timber harvested from these lands have totaled over 24,000,000 MBF.

In addition to timber sales, the intensified management of the O&C land is producing incalcuable public benefits in water, recreation, forage, minerals, fish, and wildlife habitat, and a host of other products and uses.

Reforestation. Beginning in July 1957, a major effort was under way to place in production approximately 195,000 acres of non-productive forest land. Over a million dollar a year reforestation program, financed principally by funds from the O&C counties share of gross receipts has enabled the BLM to reduce this backlog on non-productive land to a point where there is 50,000 acres of non-stocked land feas-ible to treat. There is also an additional 17,000 of non-stocked acres that has been classified as non-feasible to treat under known current methods. The BLM harvested 19,028 acres by clearcutting during the 1972 fiscal year in western Oregon. A total of 18,659 acres was plant-ed, 698 acres were seeded during the 1972 fiscal year. Through the cooperation and foresight of the O&C counties, the productive capa-city of these lands is greatly being expanded through prompt refor-estation of idle acres as the program continues.

In the 1972 fiscal year, besides planting and seeding, up to 6959 acres have been precommercially thinned and 2126 acres have been sprayed to release seedlings from brush competition. Also 3451 acres have been aerially sprayed for site improvement, mainly spraying with atrazine to kill grass and weed competition on plantation to conserve moisture. Other measures such as fencing, porcupine control, paper mulching, and aerial baiting have been carried out in the refcresta-tion program.

In two seed orchards, one located near Colton Northeast of Salem and one located at Merlin northwest of Grants Pass, attempts are being made to grow superior seedlings to produce seed for growing nursery stock for the reforestation program. Plus trees are selected in the districts and scions from these trees are grafted onto root stock. Also, each district attempts to purchase and collect seed from parti-cular seed zones and elevations for growing nursery stock and aerial

seeding. Better success in reforestation is obtained if seed used in aerial seeding or growing nursery stock is obtained from the zone and elevation where the reforestation is carried out.

Recreation. Because of rapid increase in population since World War II, recreation uses of O&C lands now looms as one of the multi-use programs. An agreement between the BLM and the National Park Service was completed which provided for the Service to conduct a survey during fiscal year 1958 for the recreational potentials of the O&C lands. Also each district conducted recreation inventories of the recreation potential of these lands.

Funds for the development of recreation sites was appropriated from the O&C counties share of the O&C Revenue. As of June 30, 1972 a total of 59 recreation sites were built and were operating. Forty-one of these recreation sites had a total of 540 camping units, 29 sites had useable trailer spaces, and 42 sites had 651 picnic units. It is estimated that there were 10,319,000 recreation visits to BLM managed land in Oregon most of the visits being to BLM managed lands in western Oregon.

Much of the success which can be claimed for the progress over the past years must be attributed to the sincere efforts of hundreds of people in all walks of life who have contributed so much in interest of wise use of this priceless heritage to protect it, use it, conserve it, and pass its future generations undiminished in value.

The Roseburg District Office was set up in 1938 with Mr. James Slattery as the District Forester in charge of the office. Boundaries of the Roseburg District extended from Graves Creek on the south to the Row River on the north, and from just east of Canton Creek on the east to the Pacific Ocean on the west. It contained nearly 1 million acres of O&C, C.B.W.R. and Public Domain lands, and also considerable acreage of the controverted lands. It contained the present Roseburg District, the Coos Bay District, the southerly portion of the Eugene District, and the northerly portions of the Medford District.

Until the latter part of the World War II period, the timber sales in the district were confined to what is now the Coos Bay District and the area from Drain north since few mills existed in the Roseburg area.

In 1945, a district office was established in Coos Bay reducing the area administered by the Roseburg District to 670,000 acres. It was reduced further when the BLM was established by the Consolidation of the General Land Office and the grazing service to 508,477 acres. The district now contained two master units, the Douglas and the South Umpqua with a declared allowable cut of 92,500,000 and 38,500,000 board feet respectively. A portion was from the approximately 100,000 acres of controverted land that the Forest Service was administering. The controverted lands portion of the allowable cut consisted of 15,700,000 board feet in Douglas Master Unit and 13,000,000 board feet in the South Umpqua Master Unit.

Under the provisions of Public Law 426 approved by Congress on June 24, 1954, the controverted lands were placed directly under the jurisdiction of the Forest Service. Provided, that all heretoafter revenue derived from said lands which was held in a special deposit by agreement between the Secretaries of Agriculture and Interior shall be deposed of in accordance with the O&C formula outlines in Title II of the O&C Act approved August 28, 1937. In addition an exchange was made with the U.S. Forest Service to adjust the boundary between the U.S. Forest Service national forest holdings and BLM holdings. The net result of Public Law 426 and the BLM - Forest Service exchange was to reduce the BLM acreage in the district to approximately 425,000 acres. The allowable cut from the controverted lands was eliminated from the District allowable cut.

Since the timber sale volume and selling price of timber was low prior to 1951 very little progress was made in intensive management on BLM lands. Personnel were held to a minimum with temporary summer help supplementing the permanent staff.

The district organization started with a district forester and later a clerk was added and then an assistant district forester.

In 1941, a district cruiser was assigned to the district and an associate cruiser classifier and two temporary cruisers and temporary compassmen. The district workload was handled on a district wide basis rather than a unit basis.

By the year 1949, the district organization consisted of a District Forester; a Forest Management Assistant, who did timber sale planning, some sale layout and other forest management activities; a Protective Assistant who acted mainly as timber sale contract administrator; a District Clerk; a forester who assisted the forest management assistant; a Cruiser/Appraiser; and compassman who also ran lines for the cruiser and assisted with the appraisals.

In 1952 there was a large expansion in employees due to 1951-1952 blowdown and the three units were set up with a Unit Forester in charge of each unit. The district was divided into the Drain, North Umpqua, and combined Dillard and South Umpqua Units. Each unit was assigned a few foresters to lay out sales, negotiate rights-of-way, cruise timber and perform other duties. The staff consisted of a District Forester, a timber management assistant, a protection or resource management assistant who helped with contract administration and supervised an inventory specialist, and a District Engineer. The clerical staff was headed by a District Clerk, a timber sale contract clerk and another general clerk. There was also a District Cruiser/Appraiser and a forester who specialized in checking timber sale appraisals and handled timber sale depletion records.

In 1956, there were approximately 35 permanent employees and 12 temporary employees. A project engineer was part of the engineering staff,

along with a general forester and some temporaries. The Inventory Specialist was supervising a crew which included three permanent foresters and four temporaries. The three timber sale units consisted of a large number of employees.

In 1958, the District was reorganized with the District Forester given the title District Manager. The staff consisted of an Operations Forester who had the District Engineer, and the appraisal and Sales Specialist under him. There was a Plans Forester with an Inventory Specialist under him. There was an Administrative Assistant with a clerical staff under him with a District Clerk in charge of it. The clerical section consisted of a Statistical Clerk, a contract clerk, property and time keeper, trespass clerk-stenographer, a file clerk and a clerk stenographer. The three units were organized as follows: A unit forester in charge, a timber sales man who acted as contract administrator, a cruiser, a plans and inventory specialist, a rehabilitation forester, a unit engineer, and some general foresters. Four of these general foresters were detailed to the inventory crew under the forest inventory specialist of the South Unit. The units were the Drain, North Umpqua, and South Umpqua-Dillard Area.

Later a staff position was added to handle rights-of-way and easements.

In 1963, the next major change was made in the District organization. Under the District Manager, the staff consisted of Resource Management Specialist and Assistant Resource Management Specialist, a Cruiser/Appraiser, and a scaler, an access management specialist and his assistant, a district engineer, with a road maintenance forester and project engineer and cartographic draftsman under him two Area Managers. One of these area managers was in charge of the North Area consisting of Drain and North Umpqua Units and the other area manager was in charge of the Dillard and South Umpqua Units which were handled as one unit. These units were in charge of unit foresters who were line supervisors and the units handled all functions in their area except for access problems.

There was also an administration assistant who had charge of the procurement of supplies, personnel matters, and budgeting and accounting and the work plan. The administrative assistant also supervised a forestry and administrative sections under two line supervisors. The forestry section handled mainly timber sales, trespasses, and road record matters while the administration handled the distribution of the mail, filing, personnel and supply matters, and other matters not handled by the forestry section.

When the office was moved to the present location on Airport Road the major change was in setting up the resource groups under the area managers to handle all problems connected with resource and not connected with timber sales and trespass. Two new timber groups were set up. The old groups were abolished and the North Area Administrator had the Drain, North Umpqua, and T.O.E. units under him along with the North Resource Group, while the South area had the Dillard, and

South Umpqua as well as the south area resource group under him.

The District is now still headed by the District Manager who supervises the district and carries out the instructions and policies of the State Director. He is authorized to sign procurement contracts up to $2,000 as well as purchase supplies up to this amount. He is a GS-14.

There is an Assistant District Manager who will function as an alternate to the District Manager. He will function in full assistant capacity with particular emphasis being given to management of manpower and work plan objectives. He is a GS-13.

Two Area Manager positions have been established. One area manager is in charge of the Douglas Resource Area. The other Area Manager is in charge of the South Umpqua Resource Area. Incumbents of these positions are in an area responsibility function as line manager after all activities. Each area manager was assigned to him one Resource Manager and his group, whose responsibility will include all activities related to long range planning and all resource management activities other than timber sales and timber trespass. The Douglas Resource area was assigned three timber managers who manage the Drain, Little River, and North Umpqua timber groups, and the South Umpqua Area Manager was assigned three timber managers who manage the Tyee, Dillard, and South Umpqua timber groups. The responsibilities include timber trespass and sales activity, including timber appraisal, contract administration, and annual timber sales plan for a five year period, all within respective assigned areas of responsibility. The Timber Managers and Resource Managers function as line field supervisors. Field employees will be assigned to them assigned directly to the Timber and Resource Managers and will look to them for work assignments and supervision. The timber managers and resource managers are GS-11's. Each timber group will have a GS-11 cruiser/appraiser.

Area managers have been delegated signing authority to:

1. Dispose of timber products excess timber sales in excess of 1,000,000 bd. ft. They are the authorized officer and will take all actions involving sales of 1,000,000 bd. ft. or less.

2. Dispose of materials up to $2000.

3. Sign grazing leases. Aditional signing authority is hereby delegated to the Area Manager as specifically described below:

   a. General correspondence between this office and contractos, licenses or permittees pertaining to specific cases and answers to inquiries preliminary to an approved contract, lease or permit.

b. Items in connection with timber sales in excess of 1,000,000 bd. ft.

(1) General correspondence with timber sale purchaser.

(2) Routine bonding company inquiries.

(3) Approval and transmittal of fire prevention and logging plans.

c. General correspondence related to leases (grazing).

d. General correspondence related to land use.

e. General correspondence related to the approved right-of-way permits and road easements.

Certain of the above items may be redelegated to Timber Managers. This can be accomplished by the use of Form 1213.1 when approved by the District Manager.

The Area Managers shall designate in writing a person to act for him when he is absent from the district, when he he absent for any reason. HE CANNOT REDELEGATE HIS SIGNING AUTHORITY ON TIMBER SALE CONTRACTS OR GRAZING LEASES.

This signing authority does not apply to internal correspondence directed to heads of other BLM offices. All correspondence directed to the State Office or the Service Centers shall be signed by the District Manager.

Correspondence which states other than standard District interpretation of policy must be prepared for signature of the District Manager.

A daily chronological file of all district correspondence will be routed the following day to the District Manager, Assistant District Manager, and Area Manager.

DISTRICT STAFF

Seven pricnipal staff positions have been provided in the organization for the purpose of providing technical quality control, training, and coordination of district-wide programs and work plans.

1. The District Engineer will be responsible for technical quality control for all engineering functions in the District including road construction and planning, camp ground planning and construction, field facilities maintenance, and cadastral engineering work. He will be responsible for all contracts with the BPR. Designs of timber sale roads will be done in the resource group. A maintenance engineer, project inspector, and two cartographic draftsmen work under the District Engineer.

2. The District Timber Management Specialist provides district-wide staff service in timber management, wildlife, and soil management. He will be responsible for quality control and coordination of district timber sales, wildlife resource inventories, and long-range planning programs. He will have a Soils and a Fish and Wildlife Specialist under him.

3. The District Mining Engineer will be responsible for technical quality control of all mineral functions in the district. He will coordinate the minerals program so as to support the total resources plans of the district. He will also perform assignments in districts under the guideline of the State Office minerals program.

4. The District Rights-of-Way Specialist will be responsible for quality control of all activities related to rights-of-way easement access matters. Line responsibility shall be carried by this officer with regard to negotiations for rights-of-way agreements and easements. This includes signing correspondence connected thereto. The negotiations for any specific easement or right-of-way agreement may be re-delegated back to the area concerned with specific approval of the Assistant District Manager.

5. The District Realty Specialist will be responsible for technical quality control of all land functions, and recreational development. He will coordinate the lands program so as to support the resource plans of the district. Specific actions which he will initiate are as follows:

a. Respond over his signature to public inquiries for information concerning land laws and regulations.

b. Make field investigations and prepare field data and appraisal report in response to public demand or Bureau motion lands case work.

c. Responsible for final impact study reports on water projects affecting BLM land.

d. Assist Area Managers with identifications and control of land use troubles.

6. Resource Management Specialist will be responsible for the coordination of the Timber Management Activities, Forest Development Activities, wildlife management activities and forest soils activities of the District.

Under the Resource Manager there is a Forest Development Specialist, a wildlife Management Specialist and a Soils Specialist. The Forest Development Specialist is also responsible for District Timber Sales Depletion Records and inventory records.

7. The District Appraiser will be responsible for quality control of all timber cruise and appraisal, including scaling and special studies, training timber management groups in current techniques,

methods, and procedures. An assistant District Cruiser and two scalers work under him.

8. The Administrative Officer will have line responsibility for all procurement (authority limited to $2,000), accounting, budgeting, and similar administrative activities. All clerical and custodial activities and coordination of recommendations made by the safety committee will be the responsibility of this position. Work plans and programs as prepared and developed by the Area Managers shall be consolidated by this officer in consultation with staff specialists who will be called upon for priority information. Funds control during the discharge of the annual work plan will be the responsibility of this position. The warehouseman, forestry section, and administrative section will be under the Administrative Officer. The forestry section will process all timber sales before advertising, process issuance of contracts after the sale, keep timber sale records as well as make out ADP's for the Denver Service Center, process trespasses, road records, and fire reports. The Administrative Section will handle the distribution of all mail, handle time reports, per diem claims, handle personnel records, keep accounting of purchase orders, process and type reforestation contract and nursery stock orders, handle files and perform other typing of correspondence.

The warehouseman will receive and issue supplies from warehouse, deliver seedling from the nursery and perform some maintenance functions in the District.

WORK FLOW

All correspondence or other material that must be signed by the District Manager which is initiated by an Area Manager or others under his supervision shall be surnamed by the Area Manager and routed directly to the District Manager for signature without staff surnaming, except in those instances where matters outside of the areas manager's is concerned.

Correspondence or other materials prepared for the District Manager's signature, which pertains to matters of district wide importance shall be surnamed by the staff specialist or specialists whose functions are involved in the communication.

Prior to 1943 cruises, the timber cruised was given a stumpage value by the cruiser based on his estimate of the value and volume. Further estimates such as number of trees, cull volume, and number poles was sometimes secured.

The management problems which developed in setting up sustained yield units, such as determining allowable annual cut and the stocking in reserve stands indicate that the securing of merchantible volume of commercial species alone was not sufficient. Other information, such

as the number of trees and volume by diameter classes, amount of cull trees for species, and the amount and the number of reserve trees, was essential if an accurate plan of management was to be developed.

The tallying of trees, whether cruised by the plot or strip method was also necessary if areas within a forty such as roadside strips were to be reserved.

The method of timber appraisal was also shifting, at least for the more important species, from the cruisers estimate of stumpage value based upon his knowledge and experience alone, to the use of an economic chart of log grade values, and logging costs for each type of operation.

More emphasis was made on type and topographic mapping, as these data were more essential with detailed management and appraisal procedure.

With the foregoing trends in mind, timber cruising was revised according to the following plan:

1. Check the land office plate for acreage, bearings and distance to be cruised before going into the field.

2. Check the pre-cruise examination to determine if any recommendations had been made regarding possible reservations or special considerations to be made during the cruise.

3. Check office information for roads or trails into the assignment area.

Douglas Fir

1. In cruising Douglas-fir all sound trees over 16" (later this was revised to over 11" DBHOB) were tallied by diameter, height, and log grades by 4" diameter were recorded. Smaller sizes were recorded as indicated in 2. below.

Height was shown in 32' logs to a 12" top inside the bark for all trees above 32" and an 8" top to trees 28" DBH and below.

Logs were graded to the Columbia River Log Scaling Bureaus' log grades.

Logs were graded in #1, #2, #3 Douglas-fir logs. The grades of all merchantable logs in the tree were shown.

Examples

48/6 123 indicate a tree 48" in diameter having 6 32' logs with a grade #1 butt log, grade #2 second log, grade #3 third log and the remainder of the tree unmerchantable because of defect and/or breakage.

64/7 1223 indicates a tree 64" in diameter with 7 32' logs, grades 1, 2, 2, and 3 in the first four merchantable logs, the remainder of the tree unmerchantable.

Dead and down, dead standing and green windfall trees which are merchantable trees were tallied separately from live merchantable trees.

In defect allowance all trees that had 100% defective logs that were below merchantable logs had the log grade completed circled, 50% defective logs by a half circle, and 25% defective by a dot after the log grade.

Breakage allowance was made as far as possible by excluding those logs in the cruise. An additional blanket percentage was allowed for breakage.

On partial cut sales those trees selected for cutting were stamped for cutting and tallied.

2. The number of poles were tallied by 4", 8", and 12" diameter classes.

3. Cull trees were tallied by diameter and height only to a 12" top with no allowance for defect or breakage.

4. Douglas-fir was classified as Douglas-fir. Other names, such as Redfir or Yellow fir were to be avoided., However, the cruiser indicated the quality as yellow fir, red fir, percentage of peelers, clears, etc. under the general description of the stand.

5. Complete logging cost data was taken in order to permit the use of the logging cost chart.

6. The volume and value of merchantable logs was determined from O&C Douglas-fir economic appraisal chart. The amount cull trees will be from the volume table based upon volume given in the economic chart.

The stumpage price was determined by deducting the logging costs and profit rates from the pend value.

7. Douglas-fir piling was cruised and stamped 100%. The length was recorded, care being taken to the top diameter which was acceptable to the market.

<u>Hemlock, Whit Fir, Red Cedar</u>

and other present species having lesser market value, or of minor importance except in

1. The same information as for Douglas-fir was taken except for log grades and lengths. Logs were not graded and trees were tallied by number of 16' logs, the tally was by diameter and height in 16' logs.

2. The top diameter to which each species was cruised was as follows:

White fir)
Shasta red fir)) 12" top
Noble fir - noble fir volume table 10" top
Hemlock - 11" small trees to 16' large trees
Port Orford Cedar - 8.6" (small trees to 15" (large trees)
Western Red Cedar - 12" top
Incense Cedar - 9" top to 11" top

Hardwoods

Cottonwood)
Maple)
Alder))) 12" top
Ash)

3. Timber quality. The quality of timber will be described in the appraisal report. A description of fair, poor, or good is not sufficient. It should be qualified whenever possible by such terms as limby, the percentage by volume of clear, peelers or #1 common.

4. Defect by individual logs. An exception to tallying by diameter and height alone will be made when allowing for defect on individual logs. The visible defect will be shown as in Douglas-fir, except that logs will be numbered from the butt without regard to grade.

Example:

40/8 1)23 indicates a 40" 8 log tree. The first log is 50% defective, a second and third logs are merchantable, and the remainder of the tree cull.

The merchantable volume of the tree was determined by a table which shows the percentage of each 16' log by scale or trees of various heights of minor species. The volume of trees of different species was obtained from volume tables giving the volume of trees of various numbers of 16' logs to a minimum top diameter.

5. Unseen defect and breakage. An allowance was made for unseen defect and breakage for sound trees both merchantable and reserve. It must be kept in mind the cruising was given to standard top diameters and are not just for merchantable logs (except when allowance had been made for cull in individual trees). The percentage for unseen defect and breakage will therefore in this class of timber apply to the entire tree, not as in Douglas-fir to only the merchantable logs.

6. Red Cedar. Red cedar merchantable poles were tallied by diameter and height, so that diameter information was available if they are reserved from cutting. There will be no set diameter limits for these poles.

Dead red cedar that was merchantable was tallied.

7. Cull. Cull was recorded by diameter and height for all species except red cedar, incense cedar and hardwoods.

8. Hardwoods were not cruised as a rule unless of sufficient quantity to be of commercial importance considering markets, values, and the supply available. When they are cruised, their height was in 8' logs.

9. Port Orford Cedar. Merchantable Port Orford Cedar, because of its high value, was cruised and branded 100%. The forest practice was determined by the District Forester and indicated in the cruising assignment. The merchantable contents of snags and windfalls were cruised and scaled separately as dead and clean Port Orford Cedar.

The Scribner Decimal Co. log scale rule was used to scale the volume of scaled logs.

Reserve Port Orford Cedar was usually cruised by 20%. If the cruise of reserve trees was other than 20% a notation was made on the tally sheet.

Ponderosa, Sugar, and White Pine

1. Log Grade. These species were graded by logs. Symbols for log grades were the same as explained for Douglas-fir. Grade classifications were those outlined for Ponderosa Pine as recorded as of November 1, 1938, by the Pacific Northwest Forest and Range Experiment station. Since no grades were listed for White and Sugar Pine, the Ponderosa Pine grades were used for all three species. Grades 3, 4, and 5 were combined in the field, and grade 6 was dropped as unmerchantable.

2. Defect by individual logs will be shown by 25%, 50% or total culls as in Douglas-fir.

The entire tree is usually merchantable, although it will not be necessary to grade a tree beyond the first #3 log: 60/8 1123 indicated a tree with two #1 logs, one #2 log and five #3 or poorer merchantable logs. For this reason, if it was desired to cull the top logs of a tree, they were graded in this way, 60/8, 11230, the 0 for the top log graded, indicating that all logs beyond that point were unmerchantable.

3. Defect and Unmerchantability in the upper logs, unseen defect and breakage was allowed for by a blanket percentage, provided that in Ponderosa Pine one percent less was deducted from the value than was deducted from the volume: if 5% were deducted from the volume, 4% was deducted from the value. This was because most of the deduction would be in the inferior grades, with a resulting greater loss in volume than in value.

4. The height was in 16' logs to an 8" top, to a 20" top in large trees for Sugar Pine, and from a 6" top in small trees 12" top in large trees for White Pine.

5. Volume tables. Ponderosa Pine volume and pond values were computed from C&C economic appraisal charts. The volume of reserve trees was also determined from this chart. The Pacific Northwest Forest survey pine volume table was used. The approximate pond value of sugar pine was obtained from the Ponderosa Pine appraisal chart. Later a separate appraisal chart was made for Sugar Pine. Such values were applied carefully as the value of the two species was not identical. As a rule, Sugar Pine was higher in value. White Pine volume was computed from the Idaho White Pine table by Bauman Girard, 1932.

6. Merchantable and Reserve Trees. Merchantable trees of those species selected for cutting were stamped. Reserve trees were not graded, nor were breakage and defect allowance indicated for reserve trees.

As a rule, all trees 28" and over in diameter were cruised 100%, whether they were stamped as merchantable or were to be reserved. Four-inch, eight-inch, and twelve-inch trees were cruised as poles and in the ratio indicated on the pole tally form. A 20% cruise was usually made of the 16", 20" and 24" trees. It was necessary to break the cruise up in this manner, in order that the cruiser would not have to make a 100% cruise of a large number of the smaller diameter reserve trees. Any variation of the procedure, as outlined here, was to be noted on the tally sheet by the cruiser.

7. Cull trees were recorded by diameter and height in 16' logs.

8. Keens Classification. All line ponderosa pine trees, except culls, were to be classified according to Keen's classification. The cruiser had to become familiar with the various classes.

The selection of trees for cutting and those to be reserved was made on the basis of Keen's classifications. The resistance to bug-infestation each class was the chief factor to be considered.

Poles

A pole tally sheet was devised separate from the remainder of the cruise tally sheet. This was done to allow more room on the cruise tally sheet and also to allow the compassman to keep the pole tally, if the cruiser believed this desirable.

Poles were tallied by species and number in each diameter class. Diameter classes were 4" (2" - 5.9"), 8" (6 -9.9"), 12" (10" - 13.9") for all species.

Sixteen 1/16" acre plots were cruised, eight plots were taken.

Snags

Snags 16" or over in diameter and 25' or over in height were tallied by diameter along.

Intensity of Cruises

At first cruising was done on a plot basis, run on strips. If 1/16 acre plots were used, 8 plots were cruised on each strip or 4 strips per forty giving a 5% cruise. If a 20% cruise was made, 32 plots per 40 were cruised. The strips were run 2.5 chains, 7.5 chains, 12.5 chains and 17.5 chains from the forty line. The 1/16 acre plots were 29.5' in radius horizontal distance.

Later cruising was done on a 20% cruise based on strips one chain wide, four strips were run per forty. If the forty contained more or less than 40 acres the acreage on the strips cruised was divided to the acreage of the tract to get the blowup factor necessary to obtain the total volume and value. For example, if the tract was 42 acres and the four strips cruised contained 8 acres to the strip, the blowup factor would be 5.25.

During the fiscal year 1952, sale layout and cruising methods were revised. Sales were laid out on a staggered setting method in order to provide a natural seed source around each cutting area. Cruising intensity was cruised to 100% cruises. This policy with minor modifications is until the present time. Automatic data processing of cruise data by IBM and major revision was instituted at this time. After figuring logging and milling costs and subtracting them from pond value. The resulting difference was split by 50% to arrive at the stumpage value.

In 1958 a volume table based on 16 foot logs and Girard Form Class was published. All cruising and grading was done by 16 foot logs rather than 32' logs and by form class. The same table was used for all species with an appropriate form class used for each of the various species based on form class measurements taken on the area cruised.

Log grades for Douglas-fir No. 1, 2, and 3 peelers or 3 No. 1 sawmill and No. 2 and 3 peelers which are given grades 4 and 5 respectively.

3-P Cruising

In about 1967 a system of cruising was started in the District called 3-P sampling. 3-P sampling is more efficient as the size of the sale increases. 3-P is probability proportional to prediction. We think 3-P sampling provides a tool which leads to better volume estimate for BLM sales. The 3-P sampling scheme ensures heavier sampling of large, more valuable trees and lighter sampling of small less valuable trees than conventional plot samples. The 3-P system substitutes a sampling error based on a kind continuous stratification of volumes,

for one based on the little or no stratification. The sampling error is based on the volume of trees as directly measured, rather than on some volume table values with attendant possible bias usually specified error of estimates. I suppose some of the shroud of mystery over the use of 3-P is heavily related to the use of the "optical dendrometer" in the measurement of sample trees selected for measurement by the 3-P system. The instrument itself looks like something out of Buck Rogers and has a nifty price tag marked about $3,000,000, but actually is a "mini rangefinder" which has been in use over fifty years. We use the optical dendrometer to measure sample trees because it makes possible the unbiased estimates of gross volume and it can be used to examine the stem for defect indicators. Also, when we first got started with 3-P, we used a computer program developed by Lewis Grosenbaugh which was based upon the measurements made by use of the Dendrometer. We feel 3-P has distinct advantages for use in BLM cruising. Some of the advantages are as follows:

1. The 3-P system permits economy in manpower, as the selection of sample trees may be done rapidly by persons of limited experience. The sample trees are marked and numbered. Measurement by an experienced cruiser then or at some later time or even at a more distant time by a prospective purchaser. We are talking about 100-150 sample trees on a sale and obtaining accuracy to better than or desired standards. Our studies indicate that sales which range from 3,000 to 18,000 total tree count still needed only between 100-150 sample trees to achieve the desired standards of accuracy.

2. By numbering the sample trees, we facilitate the opportunity to check our cruisers. Check cruisers, whether they be BLM or those of prospective purchasers, need cruise only the sample trees not the entire sale - and notes can be compared on a tree by tree basis.

3. Purchasersdo not have a dendrometer to cruise 3-P sales. They can use their own cruising techniques and utilization standards to cruise the sample trees. The computer output data for the BLM gives a blow-up factor to apply and your cruise of sample trees can be expanded to the sale as a whole. They can check each sample tree - one by one- to see how their estimate of volume compares with that of the BLM cruiser. This aspect of 3-P has much to recommend it. Industry is in favor of some system of cruising by B.M which would allow industry to know what cruise was put on a tree by the BLM. Since 1967 quite a few sales in the district have been cruised by the 3-P method.

Fall, buck, and scale cruising has been used on some sales in the district to reduce the inaccuracy of presale estimates of total net scale volume and total dollar value where the timber is defective or if breakage is likely. Sample trees on the sale are cruised, felled, bucked and scaled and then sold along with non-sample trees.

In 1968 fiscal year, the profit ratio was modified in the timber appraisals.

In the field of recreation development little was done in the district until the 1961 fiscal year. Prior to this time, leases were issued to Douglas County and to the State of Oregon for the development of two parks on the North Umpqua River. Land for these parks was obtained by the BLM through a land exchange with the North Umpqua Timber Co. In addition a long term lease was issued to the Boy Scouts on an 80 acre tract on Wolf Creek to use as a camp and recreation site.

Beginning with the 1961 fiscal year, a BLM recreation development program was started to be funded from the O&C counties share of O&C receipts. Since 1961 a number of recreation sites have been developed by the BLM in this district and maintenance of these sites has been carried out.

Other programs developed greatly in recent years include access and engineering, lands classification and land use and land disposal, and forest inventory.

In contrast to the policy existing prior to 1951, an intensive effort has been made to obtain permanent rights for access to all areas where the BLM is carrying out or will carry out in the future timber sales or other forest management activities. Rights to cross private land in the form of easements and right-of-way agreements have been obtained for large portions of the district. Agreements have been made also with many of the larger timber owners to use existing private logging roads in return for rights granted by the BLM for the use of BLM controlled roads by the private company.

Design by district personnel of permanent roads to be constructed by timber sale purchasers has resulted in the development of a system of roads that is constantly improving in quality.

In recent years, a lands specialist, mineral specialist, soils specialist and a fish and wildlife specialist have been added to the district staff and more emphasis has been made on a program of land classification and land use including small tract leases, exchanges, mining claims, recreation use permits, and other types of land use permits. Work has been greatly accelerated in the field of investigation and preservation of cases involving land use and timber cutting trespass.

After the 1937 sustained yield act was passed and the O&C Administration was set up, plans were made to compute a sustained yield allowable cut for the O&C and C.B.W.R. lands. The lands in the O&C counties were divided into twelve master units which were based on major drainage boundaries. Each master unit was divided into operating or administrative units the boundaries consisting of major timber operating areas and minor drainage boundaries such as the divide between Upper Smith River and Elk Creek on the South, and Smith River, the Siuslaw River, and Upper Smith River on the north, the Douglas-Lane County boundary on the east and just west of where Slideout Creek enters upper Smith River on the west.

Each operating area or administrative area had an allowable cut computed based on Forest Service Experiment Stations type maps, site maps, Bulletin 201 yield table volume of younger stands and sales volume data for older stands.

The sum of all the allowable cuts in each administrative unit included in a master unit were totaled to determine the estimated allowable cut for each master unit. The allowable cuts were unofficial until 1946 when public hearings were held and Master Units were officially set up with declared allowable cuts by the Secretary of the Interior. The allowable cuts declared included the timber on the O&C lands, Coos Bay Wagon Road Grant lands and Controverted lands.

In 1939, the unofficial allowable cut of the Roseburg District included the allowable of the Douglas Master Unit, the South Umpqua, then called Cow Creek, Master Unit, which included a portion of the Josephie Master Unit, the South Coast Master Unit, and a portion of the Siuslaw Master Unit then in the Douglas M. U. The allowable cut was estimated at 277,444 MM bd. ft. In 1943 the cut was 264,908 MM bd. ft. and included the South Coast Master Unit, the South Umpqua Master Unit, and the Douglas Master Unit which included a portion of the Siuslaw Master Unit. In 1947, the allowable cut was 131 MM bd. ft. and included the South Umpqua and the Douglas Master Units, with the Siuslaw portion deleted.

In 1948, the first field inventory was undertaken with the use of typing on aerial photos and random plot volume sampling in the Dillard administrative units. BLM maps were made from the field typing and along with volume sampling an allowable cut was computed. In 1951, the Gunter Road and Tyee administrative units were inventoried. In 1953, the Rock Creek and a portion of the North Umpqua administrative units were inventoried. In the period between 1954 and 1956, the Drain, Yellow Creek, and Hubbard Creek administrative units were inventoried. In 1956 and 1957, the balance of the North Umpqua administrative Unit, the Little River administrative unit, and the South Umpqua administrative unit was inventoried.

At the beginning of fiscal year 1958 a new allowable cut was declared which was based on the Forest Management Area. The cut included only O&C and Coos Bay Wagon Road lands. The Controverted lands had been exchanged to the Forest Service to administer although the funds derived from sales from these lands were distributed on the O&C formula.

The Douglas Master Unit consisted of three forest management areas; the Drain, North Umpqua, and Dillard FMA with an allowable cut of 112.8 MM bd. ft. and the South Umpqua which had 25.5 MM bd. ft. The district cut was 138.3 MM bd. ft.

In the 1959 FY field season in the Dillard FMA a new system of sampling by FMA was started. It was based on intensive field typing on

1:12000 aerial photographs and volume sampling on 1/5 acre plots located on fixed grid. The basic grid was into coordinates and the plots were 1.7 miles apart. Each plot consisted of three 1/5 acres subplots located 6 chains apart run in a direction that would enable all three subplots to be in the same type. Acreage in each type was computed by dot counting with a dot grid in each type.

The acreage in each type was totaled. The volume per acre in mature stands was determined from the IBM output on mature plots. A yield curve was computed from volume on plots on pure stands from about 30 or 40 years of age to 160 years of age. Local volume tables constructed from trees cruised on the plots was used in computing plot volumes. Using all this data from the plots and type maps the allowable cut was computed from the Dillard FMA.

In the 1960 FY field season the North Umpqua FMA was inventoried, the 1961 FY field season the Drain Unit was inventoried, and during the 1962 fiscal year field season the South Umpqua FMA was inventoried. A new allowable cut for the district was declared on July 1, 1963 of 154 MM bd. ft. for the Douglas N. U. and 33.0 MM bd. ft. for the South Umpqua FMA or a total of 187 MM bd. ft. for the district. This cut was computed in the State Office using the culmination of mean annual increment on the 1/8" international rule as a basis for figuring the rotation instead of the Scribner Decimal C rule. This resulted in a shorter rotation. Another factor used was growth on overmature stand up to 300 years. Another factor was in holding the minimum felling age as closely to rotation age. The sum effect was to increase the allowable cut. Rotation ages were 80 years of age for the Drain FMA and 90 years for the North Umpqua, Dillard, and South Umpqua FMA's.

In April 1968 a new system of inventory was started. We established around 428 permanent variable radius plots. A new allowable cut was computed from the data derived from these plots. Areas which are more valuable for other uses such as recreation and watershed management and areas that are non-forest types damageable sites and areas of low productivity were not used in computing the allowable cut.

Second growth management and mortality salvage was part of the new allowable cut. All mature timber whether dead or salvage was considered chargeable volume as well as the thinning volume. The new allowable cut was declared April 7, 1971 as 201.0 MM for the Roseburg District. The cut was made up of 188.3 MM bd. ft. final harvest volume. 11.1 MM bd. ft. mortality salvage and 1.6 MM bd. ft commercial thinning volume.

Besides the allowable cut calculation a second phase of inventory which is a plan which will show the locations where cutting of various types can be made. It will guide the timber groups in laying out sales and the resource groups in planning recreational and road developments.

Beginning with the 1959 fiscal year road maintenance on the permanent road system was financed out of the same fund that financed access roads and has continued every year since. The Bureau of Public Roads carries out most of the road maintenance for the BLM.

Reforestation of BLM administered lands by artificial measures in the Roseburg District was largely non-existant until the 1958 fiscal year. During the war years, a limited acreage was planted by CCC crews. Also from 1953 to 1958 a total 366 acres was planted. A large portion of the planting was done under the terms of the timber sale contract by planting contractors hired by the timber sale purchases. A limited amount was done by appropriated funds with planting contractors doing the planting. Beginning with the 1958 fiscal year, funds were made available by the O&C counties from their share of O&C revenue for appropriation by Congress for reforestation purposes. In addition, an inventory of all or partial deforested tracts on O&C lands in Western Oregon. A total of 35,204 acres was surveyed in the Roseburg District with a total of 13,059 acres was found to be in need of reforestation projects. Many of these areas had been deforested for a number of years.

Since July 1, 1957, a total of approximately 70,558 acres has been planted and 25,000 acres has been seeded in the Roseburg District, a large portion of which was done with appropriated funds. In addition, a program of site improvement and stand improvement work has been carried out. Site improvement measures carried out included scarification, paper mulching of planted trees, and aerial spraying with atrazine to eliminate grass competition with planted seedlings. Stand improvement measures have included brush eradication by aerial spraying to release seedlings, snag falling, and pre-commercial thinning. In addition nearly fifty miles of fence was constructed to protect plantations from damage by domestic livestock. In recent years two small seed production areas were established to provide a future source of seed for aerial seeding projects.

In the last few years the district has collected seed from plus trees in the Smith River and Tyee areas which will be used to grow nursery stock to plant in several outplanting sites as part of the Umpqua Tree Improvement Project in which the BLM, the State of Oregon and several large private companies in Western Oregon are participating in. Scions have been collected in the district to go to the BLM seed orchards in Colton and Merlin where they will be grafted to root stock for the raising of superior stock seed.

Up to June 30, 1972 a total of 3,176 acres of second growth was precommercially thinned in the Roseburg District. During the first decade of the allowable cut plan approximately 1330 acres of precommercial thinning is scheduled in the Roseburg BLM District per year. During the 1973 FY 1500 acres were contracted for precommercial thinning.

Another recent activity in Forest Development in the district is aerial fertilization of young stands. Approximately 200 acres per year have been aerial fertilized during the last few years. During the 1973 fiscal year we used liquid fertilizer on the acreage fertilized. Prior to this time dry fertilizer was used.

D I S T R I C T M A N A G E R S

James Slattery	1938 - 1951
James Watts	1951 - 1956
Merle Winn	1956 - 1959
Archie Craft	1959 - 1962
Merle Storms	1962 - 1966
George Francis	1966 -

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Cecil S. Smith

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Howard L. Richmond
James E. Hart
Robert E. Lieurance
Robert W. Mitchell
Wallace F. Harrison (Lbr.)
Robert E. Adams
Richard D. Freel (S.T.)

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Patrick E. Bardon
Lawrence F. Hanlon
Paul W. Arrasmith

INVENTORY

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James M. Pedersen
Karl F. Remmy
Robert F. Gift (S.T.)
Robert D. Sage (S.T.)
William E. Rus (S.t.)
John E. Wordal (S.T.)
Warren S. Burrill

SOUTH UMPQUA UNIT

Richard L. Thompson
Alan P. Thomson
Kenneth R. Mak
Douglas G. Burgess
John W. Prior
S. Gene Day (S.T.)
Robert G. Selsor (Lbr.)
James R. Soulia
William M. Vogt (S.T.)
Alexander W. Kennedy

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Jack A. Berkshire
Leon V. Olson
Charles E. Proudfit
Donald L. White (Lbr.)
Robert H. Feasley (Lbr.)
John G. O'Brien (Lbr.)

VEHICLES ASSIGNED AS FOLLOWS:

BLACK
'52 Jeep I-47766 (6)
'52 Jeep I-47759 (8)
'55 Jeep I-48623 (14)

TIMBER MANAGEMENT ASST.
'53 Ford I-47838 (3)

MCCORMACK
'52 Jeep I-47758 (7)

DISTRICT FORESTER
51 Pontiac I-253 (17)

HEALY
'48 Chev. I-266 (12)
'55 Jeep I-48622 (19)

HESNEY
'52 Jeep I-47767 (15)

SMITH
I-21398 (1)

BERKSHIRE
'52 Jeep I-47833 (5)

THOMPSON
'52 Jeep I-47762 (18)
'54 Jeep I-48560 (2)
'52 52 Ford I-47845 (9)
'49 Chev I-272 (16)
'56 Willys I-55649 (20)

BRADLEY
'54 Jeep I-48559 (11)
'50 Jeep I-37458 (10)

NAVY JEEPS
I-55633 I-55677
I-55634

01-15-57

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Alan P. Thomson
Kenneth R. Mak
Douglas G. Burgess
John W. Prior
James R. Soulia
Alexander W. Kennedy
Francis Korak

ENGINEERING

Jack A. Berkshire
Charles E. Proudfit
John G. O'Brien (Lbr.)

/EHICLES ASSIGNED AS FOLLOWS:

BLACK
'52 Jeep I-47766
'52 Jeep I-47759=
'55 Jeep I-48623
'45 Jeep 1-55635

LYND
'53 Ford I-47838

MC CORMACK
'52 Jeep I-47758

DISTRICT FORESTER'
'51 Pontiac 1=253

Heaney
'48 Chev. I-266
'55 Jeep I-48622
'45 Jeep I-55677
'50 Jeep I-37458
'

Healy
'52 Jeep I-47767

BERKSHIRE
'52 Jeep I-47833
'56 Willys I-55652

THOMPSON
'52 Jeep I-47762
'54 Jeep I-48560
'52 Ford I-47845
'49 Chev I-272
'56 Willys I-55649
'45 Jeep I-55634

Bradley
'54 Jeep I-48559

July 19, 1973

BUREAU OF LAND MANAGEMENT

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Assistant District Manager
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Fish & Wildlife
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V. Wing

Warehouse
E. Bagwell

Area Manager, Douglas Resource Area
D. Kobelin

DRAIN
Timber Manager
D. Taylor
D. Burkhardt
M. Creswell
T. Doss
B. Jurgensen
B. Williams
E. Williams

NORTH UMPQUA
Timber Manager
W. Hill
D. Beattie
D. Beckham
T. Chiesna
F. Maxwell
R. Popp

LITTLE RIVER
Timber Manager
P. Kangas
J. Levinson
E. Linson
A. Matthews
W. Turner
T. Watts
Vacant

DOUG. RESOURCE
Resource Manager
S. Avery
R. Agee
W. Burrill
J. Conn
V. Richardson
C. Ritter
A. Shoults
Vacant

Area Manager, South Umpqua Resource Area
R. Smith

SOUTH UMPQUA
Timber Manager
J. Norlin
M. Ashton
C. Boyter
H. Brushe
W. May
L. McKinney
L. Olson
D. Pospisil
J. Schwab

DILLARD
Timber Manager
F. Dawson
M. Anderson
J. Kent
F. Meyer
Dennis Miller
J. Patrick
J. Rabe

TYEE
Timber Manager
M. Chase
D. Brake
E. Chouinard
D. Davis
D. Flynn (*WAE)
J. Gladen
V. Olson

SOUTH RESOURCE
Resource Manager
J. McCabe
L. Andrews
D. Collins
L. Durdle
D. Duskin
R. Lewis
Dale Miller
R. Mosher

Summer Aids
Carol S. Dumont - Admin.
Stephen Gregg - Drafting

WAE Crew
Gary Brinegar
Bill Davis
Gene Dixon
*Donald Flynn
Glen Nielsen
Steve Wetherell
George Williams
Vacant

Recreation Crew (Temp.)
David Hamilton
Douglas Speedie
Bruce Boettcher

Temporary Crew Assigned to Units
Charles Baker - Tyee
John Biever - Little River
Daniel Borg - North Umpqua
Robert Case - Drain
Ronald Edwardson - South Umpqua
Scott Hayes - Douglas Resource
Doug Pattison - South Resource
David Shearer - Dillard

TOTAL VOLUME SOLD
ROSEBURG DISTRICT

	Chargeable Volume Sold MM Bd.Ft.	Chargeable Allowable Cut	%	Nonchargeable Volume Sold MM Bd.Ft.	Total Volume M Bd.Ft.
1939	30.1	277.4	11%		30,121
1940	98.3	277.4	35%		98,349
1941	128.1	277.4	46%		128,052
1942	165.3	277.4	60%		165,310
1943	144.9	264.9	55%		144,886
1944	130.4	264.9	49%		130,415
1945	57.9	144.7	40%		57,894
1946	74.5	144.7	52%		74,545
1947	107.9	131.0	82%		107,925
1948	100.1	131.0	76%		100,072
1949	69.1	131.0	53%	.5	69,630
1950	130.1	131.0	99%		130,098
1951	92.3	133.3	69%	1.3	93,592
1952	95.1	136.9	69%	5.8	100,882
1953	77.1	144.9	53%	29.2	106,339
1954	159.1	144.9	108%	4.6	163,668
1955	113.8	144.9	79%	4.5	118,273
1956	141.7	131.8	107%	.3	141,986
1957	82.8	131.8	63%	2.2	85,016
1958	154.3	138.3	117%	4.7	158,954
1959	146.2	156.4	93%	6.6	152,762
1960	163.8	156.4	105%	19.5	183,300
1961	159.4	156.4	102%	18.4	177,763
1962	140.9	187.0	75%	22.9	163,830
1963	219.4	187.0	117%	39.7	259,069
1964	212.3	187.0	114%	31.3	243,648
1965	174.5	187.0	93%	25.7	200,200
1966	198.1	187.0	106%	21.4	219,483
1967	197.7	187.0	106%	24.1	221,806
1968	145.9	187.0	78%	36.2	182,100
1969	209.6	187.0	112%	44.3	253,882
1970	228.4	187.0	122%	72.1	300,499
1971	193.7	187.0	104%	45.5	239,214
1972	223.6	223.0	100%	1.1	224.729
1973	213.7	212.0	101%	1.2	214,888
	4,980.1 MM Bd. Ft.	6,333.8 MM Bd. Ft.	78.6%	463.1 MM Bd. Ft.	5,443,180 M Bd. Ft.

VOLUME SOLD
ROSEBURG DISTRICT

	Chargeable Volume MM Bd.Ft.	Chargable Allowable Cut	% Chargeable Allowable Cut	Nondepleted Volume Sold MM Bd.Ft.	Total Volume Sold M Bd.Ft.
1962	140.9	187.0	75%	22.9	163,830
1963	219.4	187.0	117%	39.7	259,069
1964	212.3	187.0	114%	31.3	243,648
1965	174.5	187.0	93%	25.7	200,200
1966	198.1	187.0	106%	21.4	219,483
1967	197.7	187.0	106%	24.1	221,801
1968	145.9	187.0	178%	36.2	182,100
1969	209.6	187.0	112%	44.3	253,882
1970	228.4	187.0	122%	72.1	300,499
1971	193.7	187.0	104%	45.5	239,214
	1,920.5	1,870.0	102.7%	363.2	2,283,731
1972	223.6	223.0	100%	1.1	224,729
1973	213.7	212.0	101%	1.2	214,888
	437.3	435.0	100.5%	2.3	439,617

O & C TIMBER SOLD
ROSEBURG DISTRICT

Year	MBF
1939	27,208 MBF
1940	98,349 MBF
1941	125,162 MBF
1942	165,305 MBF
1943	144,886 MBF
1944	128,615 MBF
1945	55,094 MBF
1946	69,685 MBF
1947	80,685 MBF
1948	66,392 MBF
1949	55,454 MBF
1950	104,232 MBF
1951	76,751 MBF
1952	67,811 MBF
1953	72,546 MBF
1954	116,114 MBF
1955	117,753 MBF
1956	132,844 MBF
1957	84,473 MBF
1958	153,915 MBF
1959	147,924 MBF

O & C Timber Sold
Roseburg District

Year	MBF
1960	180,300 MBF
1961	166,503 MBF
1962	149,124 MBF
1963	242,979 MBF
1964	229,194 MBF
1965	184,841 MBF
1966	211,972 MBF
1967	212,406 MBF
1968	180,267 MBF
1969	245,475 MBF
1970	287,235 MBF
1971	225,547 MBF
1972	220,742 MBF
1973	208,610 MBF
Total	5,036,393 MBF

TIMBER SALES ON O&C AND CB&R LANDS

Year	M BD. FT.	Total Average Price Per M
1939	30,121 MBF	$
1940	98,349 "	1.98
1941	128,052 "	2.22
1942	165,310 "	2.62
1943	144,886 "	3.19
1944	128,615 "	3.37
1945	55,094 "	4.29
1946	70,345 "	4.36
1947	102,325 "	7.08
1948	70,372 "	10.46
1949	55,530 "	12.72
1950	105,198 "	12.92
1951	81,492 "	23.27
1952	76,682 "	28.09
1953	77,739 "	26.16
1954	129,068 "	19.26
1955	118,173 "	32.11
1956	138,986 "	41.33
1957	85,016 "	33.37
1958	158,754 "	28.32
1959	151,862 "	36.40
1960	180,300 "	37.95
1961	174,163 "	29.03
1962	162,630 "	26.58

Year	M BD. FT.	Total Average Price Per M
1963	256,569 MBF	$25.45
1964	240,148 "	20.85
1965	197,400 "	30.34
1966	213,326 "	28.73
1967	218,844 "	30.97
1968	181,604 "	33.66
1969	252,629 "	66.27**
1970	296,979 "	47.10
1971	232,622 "	39.20
1972	223,817 "	56.31
1973	212,927 "	107.01
Total	5,215,926 "	30.92

**The prices reached a very high peak during the spring of this fiscal year.

SALES ON CBWR LANDS

1939 FY	2,913 MBF
1941 FY	2,890 MBF
1942 FY	5 MBF
1946 FY	660 MBF
1947 FY	21,640 MBF
1948 FY	3,980 MBF
1949 FY	76 MBF
1950 FY	966 MBF
1951 FY	4,741 MBF
1952 FY	8,871 MBF
1953 FY	5,193 MBF
1954 FY	12,954 MBF
1955 FY	420 MBF
1956 FY	6,142 MBF
1957 FY	543 MBF
1958 FY	4,839 MBF
1959 FY	3,938 MBF
1960 FY	---------
1961 FY	7,660 MBF
1962 FY	13,506 MBF
1963 FY	13,590 MBF
1964 FY	10,954 MBF
1965 FY	12,559 MBF
1966 FY	1,354 MBF
1967 FY	6,438 MBF
1968 FY	1,337 MBF

Sales on CBWR Lands

1969 FY	7,154 MBF
1970 FY	9,744 MBF
1971 FY	7,075 MBF
1972 FY	3,075 MBF
1973 FY	4,316 MBF
Total	179,533 MBF
	5,130 M/year

TIMBER SOLD ON CONTROVERTED LANDS

1944	1,800 MBF
1945	2,800 MBF
1946	4,200 MBF
1947	5,600 MBF
1948	29,700 MBF
1949	13,500 MBF
1950	24,500 MBF
1951	11,700 MBF
1952	24,200 MBF
1953	28,500 MBF
1954	34,300 MBF
	180,800 MBF

TIMBER SALES ON PUBLIC DOMAIN LANDS

Year	MBF
1973	1,962 MBF
1972	912 MBF
1971	6,592 MBF
1970	3,520 MBF
1969	1,253 MBF
1968	496 MBF
1967	2,962 MBF
1966	6,157 MBF
1965	2,800 MBF
1964	3,500 MBF
1963	2,500 MBF
1962	1,200 MBF
1961	3,600 MBF
1960	3,000 MBF
1959	900 MBF
1958	200 MBF
1957	----- ---
1956	3,000 MBF
1955	100 MBF
1954	300 MBF
1953	100 MBF
1952	----- ---
1951	400 MBF
1950	400 MBF
1949	600 MBF
	46,454 MBF

CLEAR CUT UNITS
SOLD ROSEBURG DISTRICT

1973

Timber Group	No. of Clear Cut Units	Acres	M BD. FT.	Average Size Settings	Volume Per Acre	M BD. FT.
Drain	31	927a	38,395	29.90a	41.42	M
North Umpqua	25	690a	32,660	27.60a	47.33	M
Little River	23	698a	26,480	30.35a	37.94	M
Tyee	25	603a	22,865	24.12a	37.92	M
Dillard	33	757a	26,114	22.94a	34.50	M
South Umpqua	58	1,307a	36,724	22.53a	28.08	M
District	195	4,982a	182,338	25.54a	36.78	M

1972

Timber Group	No. of Clear Cut Units	Acres	M BD. FT. Volume	Average Size Settings	Volume Per Acre	M BD. FT.
Drain	29	1,053a	42,823	36.31a	40.67	M
North Umpqua	19	692a	33,318	36.42a	48.87	M
Little River	25	895a	27,350	35.80a	30.76	M
Tyee	25	859a	26,995	34.36a	31.43	M
Dillard	29	776a	24,940	26.75a	32.13	M
South Umpqua	55	1,089a	36,308	19.80a	33.34	M
District	182	5,364a	191,734	29.47a	35.77	M

1971

Timber Group	No. of Clear Cut Units	Acres	M BD. FT. Volume	Average Size Settings	Volume Per Acre	M BD. FT.
Drain	22	896a	39,260	40.73a	43.88	M
North Umpqua	14	419a	22,639	29.93a	54.03	M
Little River	16	752a	22,262	47.50a	29.63	M
Tyee	24	947a	27,959	39.46a	29.52	M
Dillard	40	1,313a	31,042	32.83a	23.64	M
South Umpqua	49	1,199.5a	33,742	24.48a	28.13	M
District	165	5,526.5a	176,904	33.49a	32.01	M

1971 - 1973

Timber Group	No. of Clear Cut Units	Acres	M BD. FT. Volume	Average Size Settings	Volume Per Acre	M BD. FT.
Drain	82	2,876a	120,478	33.07a	41.89	M
North Umpqua	58	1,801a	88,617	31.05a	49.20	M
Little River	64	2,345a	76,092	30.64a	32.45	M
Tyee	74	2,409a	77,819	32.35a	32.30	M
Dillard	102	2,846a	82;096	27.90a	28.84	M
South Umpqua	162	3,595.5a	106,774	22.19a	29.70	M
District	542	15,872.5a	550,976	29.29a	34.71	M

Timber Group	Inventory No. of Mature Plots	10 Point Plots Volume Per Acre	M BD. FT.
Drain	38	37,073	M
North Umpqua	46	53,736	M
Little River	18	33,258	M
Tyee	22	36,306	M
Dillard	48	24,442	M
South Umpqua	60	27,513	M
District	232	34,922	M

COMPARISON: 10 POINT INVENTORY PLOTS WITH 1/5 ACRE PLOTS

10 Point Plots F.M.A.	No. Plots	Total Vol. Bd.Ft.	Vol. Per Acre Bd.Ft.	S.E. Vol. Per Acre	S.E. %	Coef. Variations
Drain	55	1,982,386	36,043	1.944	5.39	40.00
North Umpqua	62	3,042,763	49,077	2.707	5.52	43.44
Dillard	55	1,426,067	25,935	1.583	6.48	44.88
South Umpqua	60	1,650,766	27,513	1.623	5.90	45.69
	232	8,101,982	34,922			

1/5 Acre Plots F.M.A.	No. Plots	Total Vol. Bd.Ft.	Vol. Per Acre Bd.Ft.	S.E. Vol. Per Acre	S.E. %	Coef. Variations
Drain	81	3,282,356	40,523	1.985	4.90	44.08
North Umpqua	67	3,559,624	53,128	2.840	5.35	43.75
Dillard	98	3,874,744	39,538	1.823	4.61	45.66
South Umpqua	83	2,518,128	30,339	1.623	5.36	48.79
	329	13,234,852				

10 Point Plots Timber Group	No. Plots	Total Vol. Bd.Ft.	Vol. Per Acre Bd.Ft.	S.E. Vol. Per Acre	S.E. %	Coef. Variations
Drain	38	1,408,744	37,073	1.786	5.83	36.12
North Umpqua	46	2,471,848	53,736	2.894	5.55	37.66
Little River	18	598,651	33,258	4.707	14.15	60.04
Tyee	22	798,731	36,306	3.403	10.67	43.97
Dillard	48	1,173,212	24,442	1.583	6.48	44.88
South Umpqua	60	1,650,766	27,513	1.623	5.90	45.69
	232	8,101,982				

1/5 Acre Plots Timber Group	No. Plots	Total Vol. Bd.Ft.	Vol. Per Acre Bd.Ft.	S.E. Vol. Per Acre	S.E. %	Coef. Variations
Drain	57	2,410,656	42,292	2.225	5.76	40.08
North Umpqua	53	2,879,771	53,128	3.272	6.02	43.84
Little River	14	679,853	48,561	6.109	12.58	47.07
Tyee	39	1,646,186	42,210	3.421	8.10	50.62
Dillard	83	3,100,258	37,350	1.805	4.83	43.77
South Umpqua	83	2,518,128	30,339	1.625	5.36	48.79

10 Point Plots Master Unit	No. of Plots	Total Vol. Bd.Ft.	Vol. Per Acre Bd.Ft.	S.E. Vol. Per Acre	S.E. %	Coef. Variations
Douglas	172	6,451,216	37,507	1.468	3.91	51.32
South Umpqua	60	1,650,766	27,513	1.623	5.90	45.69

1/5 Acre Plots Master Units	No. of Plots	Total Vol. Bd.Ft.	Vol. Per Acre Bd.Ft.	S.E. Vol. Per Acre	S.E. %	Coef. Variations
Douglas	246	10,716,724	43,564	1.351	3.10	48.56
South Umpqua	83	2,518,128	30,339	1.625	5.36	48.79

10 Point Plots	No. of Plots	Total Vol. Bd.Ft.	Vol. Per Acre Bd.Ft.	S.E. Vol. Per Acre	S.E. %	Coef. Variations
North Half	117	5,025,149	42,949	1.814	4.22	45.48
South Half	115	3,076,833	26,755	1.171	4.38	46.92

1/5 Acre Plots	No. of Plots	Total Vol. Bd.Ft.	Vol. Per Acre Bd.Ft.	S.E. Vol. Per Acre	S.E. %	Coef. Variations
North Half	148	6,841,980	46,230	1.763	3.81	46.39
South Half	181	6,392,872	35,318	1.171	3.83	49.25

10 Point Plots	No. of Plots	Total Vol. Bd.Ft.	Vol. Per Acre Bd.Ft.	S.E. Vol. Per Acre	S.E. %	Coef. Variations
Roseburg District	232	8,102,982	34,992	1.210	3.49	52.78

1/5 Acre Plots	No. of Plots	Total Vol. Bd.Ft.	Vol. Per Acre Bd.Ft.	S.E. Vol. Per Acre	S.E. %	Coef. Variations
Roseburg District	329	13,234,852	40,228	1.097	2.73	49.47

CHRONOLOGY OF OFFICIAL DECLARATIONS OF ALLOWABLE ANNUAL CUT BY MASTER UNITS

1. Original Declarations (1945 and 1946):

Douglas M. U.	77.0 MM	bd. ft.
South Umpqua M. U.	25.5 MM	bd. ft.
Total	102.5 MM	bd. ft

2. Oct. 25, 1955 Declaration:

Douglas M. U.	89.4 MM	bd. ft.
South Umpqua M. U.	25.5 MM	bd. ft.
Total	114.9 MM	bd. ft.

3. Feb. 28, 1956 Declaration:

Douglas M. Un.	106.3 MM	bd. ft.
South Umpqua M. U.	25.5 MM	bd. ft.
Total	131.8 MM	bd. ft.

4. Oct. 30, 1957 Declaration:

Douglas M. U.	112.8 MM	bd. ft.
South Umpqua M. U.	25.5 MM	bd. ft.
Total	138.3 MM	bd. ft.

5. July 3, 1958 Declaration:

Douglas M. U.	112.8 MM	bd. ft.	
South Umpqua M. U.*	32.5 MM	bd. ft.	(* 1st increase)
Total	145.3 MM	bd. ft.	

6. April 1, 1959 Declaration:

Douglas M. U.	123.9 MM	bd. ft.
South Umpqua M. U.	32.5 MM	bd. ft.
Total	156.4 MM	bd. ft.

7. July 1, 1962 Declaration:

Douglas M. U.	135.0 MM	bd. ft.	
South Umpqua M. U.	28.0 MM	bd. ft.	
Total	**163.0		(**includes 5.4 MM on P.D. lands - for first time)

8. July 1, 1965 Declaration:

Douglas M. U.	154.0 MM	bd. ft.
South Umpqua M. U.	33.0 MM	bd. ft.
Total	187.0 MM	bd. ft.

9. Now 10 point inventory 7-1-69:

Douglas M. U.	157.560 MM	bd. ft.
South Umpqua M. U.	42.649 MM	bd. ft.
	200.209 MM	bd. ft.

10. July 1, 1971 Adjusted Allowable Cut down to 10 point inventory cut:

Douglas M. U.	180.000 MM bd. ft.
South Umpqua M. U.	43.000 MM bd. ft.
Total	223.000 MM bd. ft.

11. July 1, 1972 Adjusted Allowable Cut down to 10 point inventory cut:

Douglas M. U.	169.000 MM bd. ft.
South Umpqua M. U.	43.000 MM bd. ft.
Total	212.000 MM bd. ft.

12. July 1, 1973 10 point inventory Allowable Cut:

Douglas M. U.	158.000 MM bd. ft.
South Umpqua M. U.	43.000 MM bd. ft.
Total	201.000 MM bd. ft.

DOUGLAS MASTER UNIT

Age	Acres	International 1/8 Vol. MBF	Annual Growth	Scribner Vol/Acre	Scribner Volume
Hdwd	997				
NS	14,955				
15	16,949				
10	28,908				
20	15,916				
30	7,976	87,018	3,833,266	10,682	85,199,632
40	7,973	143,761	3,643,661	14,606	116,453,638
50	10,966	246,549	4,752,664	18,336	201,072,576
60	2,942	78,548	1,205,632	21,872	64,347,424
70	12,951	397,324	5,001,676	25,214	326,556,514
80	8,943	307,845	3,242,732	29,864	267,073,752
90	5,974	226,600	2,025,186	32,722	195,481,228
100	14,925	614,955	4,707,345	35,385	528,121,125
110	11,964	529,275	3,491,095	37,854	452,885,250
120	5,982	281,387	1,604,372	40,129	240,059,678
130	6,479	346,179	1,707,063	42,211	294,597,569
140	3,988	207,097	881,348	44,098	175,860,824
150	3,930	212,306	775,782	45,791	179,958,630
160	9,970	557,104	1,732,786	47,290	471,482,300
170	5,982	343,953	898,496	48,596	290,701,272
180	997	58,705	126,220	49,707	49,557,879
190	997	59,850	102,691	50,625	50,473,125
200	10,909	664,816	866,175	51,348	560,155,332

Douglas Master Unit

Age	Acres	International 1/8 Vol. MBF	Annual Growth	Scribner Vol/Acre	Scribner Volume
210	3,988	245,733	222,132	5[illegible],877	206,885,476
220	5,982	371,231	192,620	52,213	312,346,166
230	1,994	124,150	17,148	52,354	104,396,876
240	5,982	372,260	89,730	52,302	312,873,564
250	3,930	243,511	151,698	52,055	204,579,150
260	3,988	245,091	248,054	51,615	205,840,620
270	977	60,535	85,543	50,980	50,827,060
280	12,961	774,303	1,417,933	50,152	650,026,072
300=	39,822	2,273,080	6,240,107	47,913	1,907,991,486
	291,717	10,073,166	32,797,025		9,563,508,330

Hdwd 997 Acres .34%

1-70 years 793,629,784 Bd. Ft. Immature 119,536 Acres 40.98%

80+ years 7,712,174,440 Bd. Ft. Mature 171,184 Acres 58.68%

8,505,804,224 Bd. Ft 291,717 Acres

Mature Volume 90.66% of volume

Mature Acres 58.68% of acres

8,505,804,224
16,017,966 non-regulated volume

8,489,786,258
259,370,044 1970 FY Depletion

8,230,416,254
195,768,057 1971 FY Depletion

8,034,648,197
179,662,500 1972 FY Depletion

7,854,985,697
175,339,300 1973 FY Depletion

7,679,646,397 Volume 07-01-73

Douglas Master Unit

80+	166,015	
70	12,803	
60	2,811	
50	10,855	
40	7,890	Type Acres
30	7,953	
20	15,799	7-1-73
10	29,973	
1-5	19,773	
NS	16,444	
Hdwd.	977	
	291,313	Forest Land

Declared Allowable Cut 1st Decade	(Final Harvest	146.61	MM bd. ft.
	((Mortality Salvage	9.44	MM bd. ft.
	(Commercial Thinning	1.51	MM bd. ft.
		157.56	MM bd. ft.

Acreage to be cut in 1st decade allowable cut	(Final Harvest	3,082.7 Acres
	(Mortality Salvage	1,711.8 Acres
	(Commercial Thinning	185.0 Acres
	(Precommercial Thinning	1,236.5 Acres

Mortality Salvage through 7th decade-
Commercial thinning peaks in 14th decade 20.79 MM bd. ft. per year.

SOUTH UMPQUA FMA & MASTER UNIT

Age	Acres	International 1/8 Vol. MBF	Annual Growth	Scribner Vol/Acre	Scribner Volume
NS	5,814				
1-5	7,752				
10	5,814				
20	3,876				
30	2,907	12,779	1,208,731	5,114	14,866,398
40	6,783	71,466	2,644,692	84,508	57,706,764
50	4,845	69,313	1,764,065	11,687	56,623,515
60	4,845	86,323	1,638,095	14,649	70,974,405
70	3,876	81,663	1,210,862	17,396	67,436,896
80	3,876	93,268	1,110,474	21,110	81,829,360
90	1,938	51,936	505,043	23,316	45,189,408
100	1,938	56,737	454,849	25,305	49,041,090
110	3,876	122,071	809,696	27,079	104,848,204
120	4,845	162,085	887,120	28,636	138,741,420
130	969	34,065	152,327	29,997	29,047,713
140	1,938	70,927	254,459	31,103	60,280,614
150	1,938	73,222	204,459	32,012	62,042,256
160	3,876	150,028	308,530	32,705	126,764,580
170	3,876	152,614	208,141	33,182	128,620,432
180	1,938	77,098	54,264	33,442	64,771,836
190	969	38,694	1,938	33,487	32,448,903
200	1,938	77,177	46,124	33,214	65,564,532
210	2,907	114,699	144,478	32,926	95,715,882

South Umpqua FMA & Master Unit

Age	Acres	International 1/8 Vol. MBF	Annual Growth	Scribner Vol/Acre	Scribner Volume
220	969	37,626	73,160	32,322	31,326,018
230	969	36,769	98,257	31,502	30,525,438
240	9,690	356,611	1,733,568	30,446	295,205,850
250	2,907	102,908	445,062	29,213	84,992,191
260	969	32,694	173,451	27,774	26,883,936
270	969	30,835	198,451	26,059	25,511,171
280	969	28,725	223,548	24,158	23,419,102
300	3,876	95,012	1,094,582	19,708	76,388,208
	104,652	2,317,345	9,688,064		1,948,696,122

0-70 years 267,607,978 bd. ft. 46,512 Acres 44.44%

80+ years 1,678,088,144 bd. ft. 58,140 Acres 55.56%

1,945,696,122 bd. ft. 104,652 Acres

Mature Timber 55.56% of acreage, 86.24% of volume.

1,945,696,122 Total Vol. Forest Land
48,077,684 1970 FY Depletion

1,897,618,438
46,434,442 1971 FY Depletion

1,851,183,996
44,032,300 1972 FY Depletion

1,807,151,696
38,330,000 1973 FY Depletion

1,768,821,696 Vol. 07-01-73

South Umpqua FMA & Master Unit

Final Harvest	40.925 MM bd. ft.
Mortality Salvage	1.642 MM bd. ft.
Commercial Thinning	.082 MM bd. ft.
Total Allow. Cut 1st Decade	42.649 MM bd. ft.

Acreage to be cut during 1st decade per year

1542.2 Acres final harvest
394.1 Acres mortality salvage
52.6 Acres commercial thinning
91.9 Acres precommercial thinning

Mortality Salvage ends 7th decade - Commercial Thinning peaks 2.44 M 8th decade.

80+	53,213	
70	3,818	
60	4,807	
50	4,784	
40	6,747	Type Acres
30	2,862	
20	3,751	7-1-73
10	6,954	
1-5	7,776	
	104,652	

SUMMARY OF TOTAL REFORESTATION ACCOMPLISHMENTS

ROSEBURG DISTRICT

Year	Seeding Acres	Planting Acres	Nursery Stock	Total Acres	Trees Planted Per Acre
1943		245	108.7 M	245	443.7
1953		146	90.0 M	146	616.4
1954	18	456	279.4 M	474	612.7
1955	33	635	402.2 M	668	633.4
1956	229	1,020	648.6 M	1,249	635.9
1957	86	630	441.8 M	716	701.3
1958	552	3,934	2,295.7 M	4,486	583.6
1959	1,436	6,376	3,680.7 M	7,812	577.3
1960	3,031	2,133	1,172.4 M	5,164	549.6
1961	3,103	2,755	1,610.5 M	5,858	584.6
1962	2,118	4,200	1,958.4 M	6,318	466.3
1963	3,783	5,415	2,495.7 M	9,198	460.9
1964	1,410	8,261	4,129.0 M	9,671	499.8
1965	1,788	3,168	1,447.0 M	4,956	456.8
1966	2,464	4,177	2,084.0 M	6,641	498.9
1967	1,926	3,661	1,774.0 M	5,587	484.6
1968	1,012	2,504	1,196.0 M	3,516	477.6
1969	1,318	2,240	966.7 M	3,558	431.5
1970	876	3,241	1,426.5 M	4,117	440.1
1971		3,817	1,690.0 M	3,817	433.8
1972		4,427	1,896.0 M	4,427	428.3
1973		7,303	3,381.0 M	7,303	463.0
Total	25,183	70,744	35,174.3 M	95,927.0	497.2
Ac./yr.	1,145	3,216	1,598.8 M/yr.		